

Running head: ONLINE SOCIAL SUPPORT, OPTIMISM AND GENDER DIFFERE

‘What’s up? LOL!’: Optimism and Gender Differences in Social Support on Facebook.com

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### Abstract

The purpose of this study was to investigate gender differences in the relationship between optimism and social support both received and perceived on the social networking site, Facebook. College students (N=57) completed the LOT-R (Scheier, Carver & Bridges, 1994) and submitted genuine messages received on the website; these messages were then coded by participants and trained third-party coders for three measures of social support: emotional depth, emotional tone, and personal relevance. Results showed no correlation between optimism and online social support, with the exception of males and their perceptions of emotional tone. When receiving messages from other females, both genders perceived greater emotional depth than for male-sent messages, with female recipients perceiving the highest levels. Males also perceived their messages to be more personally relevant than females. These results imply that online social networking messages are not intimate and positive enough to their recipients to elicit associations with optimism levels. Still, it appears that some gender differences present in face-to-face social interactions also apply to online social networking.

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There is no doubt that the internet has taken on a very important role in the social lives of many of today’s young adults. Statistics are readily available regarding internet usage habits and safety features, but there has been little research on the quality of the social interactions that occur throughout the web. Social networking sites in particular have become increasingly popular since about 2004. MySpace.com currently has over 110 million active monthly users world-wide (Owyang, 2008); Facebook.com, the second most-popular social networking site, has over 61 million registered users (<http://www.facebook.com/press/info.php?statistics>). The prevalent view instigated by the media assumes that these websites are dangerous and cause many of their users to become victims of sexual advances or job discrimination. The obscene nature of these websites recently made national headlines when Miss New Jersey Amy Polumbo almost lost her crown after “unladylike” pictures of her from her Facebook profile were leaked to the public and specifically shown on NBC’s Today Show (Parry, 2007). While these photos were thought to be typical of a 21-year-old college student, they nevertheless put a negative spotlight on social-networking websites. Are the exchanges on these websites indeed that incriminating? Due to their popularity, it can be inferred that individuals are benefiting in some way from using social networking websites, but the exact advantages are currently unknown. This study aims to investigate the quality of social interactions on the internet via the analysis of online messages gathered from the Facebook website. It delves a step further by investigating the social support of individuals through the lens of emotional outlook and gender differences. A Pearson correlation analysis compares the relationships between levels of optimism and the received and perceived quality of individuals’ social support. Further analysis explores the possible effects and interactions between gender and quality of social support. It is important to note that while

individual messages are explored, this study relies on the combination of these messages to represent a more holistic picture of a person's social support. The results provide new information about the quality of social support on social networking sites for differing emotional outlooks and genders.

Social support has been a popular construct to explore, mainly because it is omnipresent in all individuals' lives. Despite its frequent study, there is no common definition of the term. Trunzo and Pinto (2003) consider it to be a complicated construct involving between-person and within-person dynamics among an individual and one or more family members, friends, and acquaintances. Additionally, it may be viewed as the functional aspect of a social relationship, providing its recipient with various products of a relationship (Due, Holstein, Lund, Modvig, & Avlund, 1999) – for instance, feelings of love and appreciation and the ability to express emotions to others. The broad definitions of social support require it be examined through several components. The selected features of social support in this study are emotional depth, emotional tone, and personal relevance.

Berndt (2003) defines the term *relationship quality* as a feature of social support that includes prosocial behavior, intimacy, loyalty, and personal self-disclosures. Many others have also explored the importance of intimacy and self-disclosure in social relationships (Johnson, et al., 2007; Pagano & Hirsch, 2007; Due, et al., 1999). I use the term *emotional depth* to represent levels of intimacy and self-disclosure. The closer the relationship, the more likely those involved will create social interactions that include very personal information. Social exchanges that are high in self-disclosure and intimacy include emotional content that would not be shared with just anyone. One can easily imagine the differences between a conversation with a best friend versus

a store clerk. The type of content in each exchange would be vastly dissimilar and would certainly have differing effects on the speakers.

Emotional depth is experienced differently by both genders. In general, young adult women experienced more emotional support than males (Carbery & Burhmester, 1998). More females reported having a confidant with whom they shared personal information, especially one who was a family member or friend (Due, et al., 1999). To them, it is important to have relationships in which they feel comfortable discussing intimate topics. Females are often characterized as having closer, more intimate friendships (Clark & Bittle, 1992; Johnson, 2007), especially in same-sex friendships (Bukowski & Kramer, 1986). Females also consider their friendships with other females to be more positive than males perceive their own same-sex friendships (Veniegas & Peplau, 1997). This may result from the increased self-disclosure females exhibit in their relationships (Pagano & Hirsch, 2007). It can be inferred that high self-disclosure of intimate information reinforces the bonds between friends and creates a more trusting, close relationship. Still, not all studies have found significant gender differences for emotional depth. Johnson, et al. (2007) did not find any gender differences in their analysis of intimacy and emotional closeness. Continued research for this variable is still necessary to determine males' and females' perceived emotional depth in their friendships.

The emotional tone – either a positive or negative connotation – of social interactions is also crucial to the study of social support. Social support inherently contains interactions conveying emotional content (Due, et al., 1999). Positive social support is considered a vital element of enacted social support, the actual social interaction taking place (Swickert, Rosentreter, Hittner & Mushrush, 2002). More positive social support is associated with positive emotions while negative social relations correlate with negative feelings, such as anger and

sadness (Hall & Nelson, 1996). For example, an exchange in which one person compliments another on clothing choice elicits sunnier feelings for both people involved than an interaction involving criticism. Moreover, higher levels of emotional depth have been correlated with more positive social behaviors and communications (Brendgen, Markiewicz, Doyle & Bukowski, 2001). The more personal the interaction, the more positive it is expected to be for all involved. In reference to the example of contrasts in conversations with either a best friend or a store clerk, the personalized and confidential information shared between best friends would usually produce more positive feelings for both individuals.

Gender differences in the emotional tone of social interactions have been found. Females display more empathy in their relationships (Clark & Bittle, 1992), possibly because they are more likely to exhibit internal emotions in their friendships that males tend to withhold (Timmers, Fischer & Manstead, 1998). Therefore, females' social interactions would be expected to offer more positive support and cause others to feel good about the social interaction. Other research demonstrates that this is not always the case. Females engage in more social support, but this does not always result in more positive feelings. More social support is associated with higher levels of both negative and positive interactions (Hall & Nelson, 1996). The emotional tone of the social interaction certainly affects those taking part in the relationship. Knowing whether or not the interaction taking place has a positive or negative undertone is important when examining social support.

While the previous two aspects of social support have been extensively researched, there is little knowledge about the personal relevance of communicated material in social interactions. Material that relates to the individual receiving it is more salient than material that has a general focus or describes others' behaviors and opinions. Personally relevant interactions affect

attitudes and the processing of the information (Petty & Cacioppo, 1984). In fact, personally relevant messages were processed systematically while less-relevant messages were processed with an over-reliance on heuristics (Chaiken, 1980). When one reads a written message that is about himself, he is more likely to be more rational and thoughtful when encoding the interaction than if the message is about another person or event (Sorrentino, Bobocel, Gitta & Olson, 1988). However, Sorrentino, et al. did not find significant mental processing effects in all studies of personal relevance. My study aims to learn more about the consequence of personal relevance present in online social interactions.

An individual's emotional outlook on life has been shown to greatly impact the social network in which one is enmeshed. Optimism and pessimism are two such aspects of personality that affect both the received quality and the perceived quality of social support and relationship quality. Optimism suggests that future outcome expectancies will be positive. These outcomes may refer to either isolated circumstances or a dispositional trait that governs general thoughts (Segerstrom, 2001). Likewise, pessimism implies negative outcome expectancies either specifically (state) or generally (trait). While there has been previous research devoted to the relationships between optimism, pessimism, and social support, little is presently known about individuals' perceptions of social support and relationship quality when the studied social messages exist on the internet. The more impersonal and anonymous nature of the internet creates questions about discrepancies between the quality of social support received online versus in face-to-face communications. As the field of psychology attempts to catch up with the recent explosion of online relationships and networks, it is a necessity to consider the growing reliance on online social interactions.



Optimists and pessimists live in very different social worlds. Research on social network size is inconclusive. Brissette, Scheier and Carver (2002) found a positive relationship between optimism and network size, but other studies have yielded no such correlation (Geers, Reilley & Dember, 1998). Besides sheer size, optimists engage in more social and prosocial behaviors (Watson, Clark, McIntyre & Hamaker, 1992) and receive greater social support (Brissette, et al., 2002; Harper, et al., 2007; Scheier & Carver, 1987; Srivastava, McGonigal, Richards, Butler & Gross, 2006) that is more emotionally intense (Karademas, 2006). The increased levels of social support for optimists may be due to their projected personalities. Individuals feel it is easier to provide social support to optimists rather than pessimists, as the negative perspective inherent to pessimists evokes uncomfortable and bewildering feelings to those around them (Trunzo & Pinto, 2003). Additionally, optimists report higher relationship quality than pessimists (Srivastava, et al., 2006). This is sensible, as high levels of social support also contribute to high levels of relationship satisfaction.

While it is apparent that optimists and pessimists receive different amounts and intensities of social interactions, is there a subsequent difference in the subjective levels of social support they perceive? Studies investigating the mood-congruency effect provide support for an affirmative answer to this question. Mood-congruency occurs when one's emotional disposition – for example, optimism – affects the way in which stimuli are perceived. When estimating potential risks, pessimists predicted more negative outcomes and optimists predicted more positive outcomes for the same events (Borkenau & Mauer, 2006). Scheier and Carver (1983) also found that those with negative affects had increased estimates of other negative events. Mood-congruency has been found in individuals' perceptions of friendships, a similar construct to the evaluation of social support (McFarland, White & Newth, 2003). In addition, optimists had

more positive thoughts about written messages than did pessimists (Geers, Handley & McLarney, 2003). When one has a rosy disposition, material often aligns with the upbeat attitude and is perceived to be quite positive.

Mood-congruency effects are further supported by attentional bias studies. It suggests that an individual's emotions influence the attention allotted to corresponding stimuli. DeSteno and Petty, et al. (2000) found that emotional states, both positive and negative, influenced the judgments of events with emotionally-related tones or themes. For example, an angry individual contributed more attention to an angering event than a sad or happy event, resulting in the prediction of a higher likelihood for the occurrence of the angry event. Furthermore, positive or negative emotions can bias the interpretation of external stimuli to produce information congruent with the emotion, as evident in several studies by Niedenthal and Setterlund (1994). After completing a lexical decision task, participants induced to feel happy identified happy words much faster than sad-induced participants, and sad-induced participants made faster lexical judgments for sad words than happy-induced participants. Segerstrom (2001) found similar results. In other words, optimists are more likely to attend to similarly positive stimuli than negative stimuli; pessimists attend to more negative stimuli than positive stimuli.

Social support and emotional outlook are crucial to psychological and physical health. The presence of social support helped to lower experienced distress in breast cancer victims (Trunzo & Pinto, 2003) and caregivers of AIDS patients (Park & Folkman, 1997). Optimists generally experienced more positive moods and lower blood pressure than pessimists, implying longer and healthier lives for those with dispositional optimism (Raikkonen, Matthews, Flory, Owens & Gump, 1999). Furthermore, many studies have shown that optimists had overall better health outcomes (Scheier & Carver, 1987), improved physical and psychosocial health behaviors

after cancer diagnoses (Harper, et al., 2007) and less sickness and death (Peterson, Seligman & Valliant, 1987) than their pessimist counterparts. Since both constructs are associated with similar mental and physical health advantages, it is likely that they would correlate with each other as well.

The research regarding optimism and social interactions has been developed rather extensively, but there is little knowledge that connects these factors in relation to the new social structures on the internet. In a study on internet optimism, participants believed they would experience more positive events and fewer negative events than the average person, with heavy users reporting the most optimism (Campbell, Greenauer, Macaluso & End, 2007). Perhaps these users received more positive social support in their online interactions, creating their higher optimism levels from the start. Adolescents who received positive social feedback on a social networking site experienced higher levels of self-esteem (a correlate of optimism) while those receiving negative feedback had dips in self-esteem (Valkenburg, Peter, & Schouten, 2006). The interactions occurring on these websites affect their recipients, but the quality of these social interactions is still unknown. Because the internet, and social networking sites in particular, are a newer medium of communication, there is still much to be learned in this arena.

It is essential to become acquainted with internet social networking users to fully understand this vastly growing population. In a large study on adolescent social networking, 55% of the population owned a social networking profile. Most profile owners used the sites to communicate with friends they saw both often and rarely (PEW Internet & American Life Project, 2007), with more communication bestowed on friends living in close proximity (Wellman, Haase, Witte & Hampton, 2001). This tendency to communicate with pre-existing friends was especially true for girls, who were also more likely to use the website, MySpace,

than boys (Boyd, 2008). These findings are consistent with the idea that the internet is often used as a supplementary tool of communication to pre-existing friendships. High levels of usage correlated positively with larger social networks containing many weak bonds, and most communication occurred to preserve friendships existing offline (Wellman, et al., 2001; Boyd, 2008). Yet, there are users who try to form new relationships. About half (49%) of profile owners used the internet to make new friendships as well (PEW Internet & American Life Project, 2007).

The internet fosters different social environments and fulfills different social functions than face-to-face or telephone communications. In fact, people communicating on the internet have been found to have much lower positive and negative magnitudes of social relationships quality when compared with individuals communicating face-to-face (Matsuba, 2006). It is particularly interesting that the interactions taking place on social networking sites are taking place in a public or semi-public sphere (Boyd, 2008). The addition of an audience of friends and other profile viewers actively observing the messages posted on the websites adds another dimension to the social climate the sites offer. Considering this, it is unusual that people are so candid and self-disclosing while communicating on the internet. Research has demonstrated that individuals disclose more personal information while online than they do when communicating face-to-face (Joinson, 2001) and are more likely to repeat overly intimate information originally communicated while online than in a spoken conversation (Henderson & Gilding, 2004). This may occur because the one-dimensional quality of the internet eliminates the awkward pauses and body language that accompany conversations of a personal nature. By discussing intimate subjects over the internet, social interactions become easier to face while also potentially losing some of their emotional power.

In general, individuals who use the internet for leisure purposes, such as social networking, have been linked with higher perceptions of social support (Swickert, Hittner, Harris & Herring, 2002). Again, the internet may act as a supplementary form of communication, adding to – but not replacing – the powerful social contact accomplished by telephones and face-to-face meetings (Wellman, et al., 2001). For users that utilized the internet to connect with pre-existing friends, internet communication was also positively related to closeness of friendships (Valkenburg & Peter, 2007). This may result from a predisposition to be very sociable (Nie, 2001). Internet users also saw their friends and family members just as often as non-users. Those who were long-time users also belonged to the most community organizations (Katz & Aspden, 1997), implying that the internet is not a mechanism for removing its users from “real world” offline activities. Longitudinal studies have also found that continued internet usage was related to a slight increase in communication with friends (Schlovski, Shiesler & Kraut, 1996), although this may be related to the formerly mentioned idea that online communication acts as a supplementary communication tool to previously established friendships. In contrast, use of the internet has been associated with less communication with family and smaller social circles (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay & Scherlis, 1998). Frequent internet use was also associated with lower levels of attachments to close friends (Mesch, 2001). One study failed to find any statistical differences in internet users’ likelihood of making friends and having a sociable disposition (Katz & Aspden, 1997). Evidently, more research must be done to eradicate these contradictions.

The present study aims to add to the previous research by examining both the received social support (rated by independent coders in this study) and perceived social support (rated by participants) found in online social interactions divided by gender and optimism levels. Thus far,

only two studies have examined the gaps between received social support and perceived social support (Helgeson, 2003; Srivastava, et al., 2007). Discrepancies between both measures were discovered, indicating a difference in perceived social support compared to received social support received. Understanding this difference is important because it sheds more light on the way individuals with different dispositions interpret incoming social communications. One's perceptions of social support may lead to fulfilled relationship expectations, a crucial aspect of happiness (Srivastava, et al., 2007). New data will provide a better understanding of online social networks and their effects on internet users. It will offer insight regarding the similarities and disparities between online interactions and face-to-face interactions.

This study has three purposes. The first objective is to understand more about social support and interactions on the internet. The investigation of messages between individuals' real-life friends and acquaintances on social networking sites provides a very colorful description of the social interactions occurring online. The messages in the study have not been created in an unrealistic laboratory setting. Goodings, Locke & Browne (2007) explored real messages, but they only hinted at social support and qualitatively analyzed messages from only four individuals. The second aim is to determine any differences in levels of perceived emotional depth, emotional tone, and personal relevance in online social interactions along the continuum of optimism. These ratings must be compared to ratings made by coders to determine if the individuals' perceptions are perceptions and not simply reflections of the social support they are receiving. Based on previous research, I predict that individuals with high-optimism scores will *receive* more emotionally deep, positive, and personally relevant messages than individuals with low-optimism scores. Furthermore, I expect that high-optimism individuals will *perceive* their messages to be more emotionally deep, positive, and personally relevant than would independent

coders. This hypothesis is consistent with the mood congruency bias previously discussed. The last aim of the study is to investigate gender differences amongst ratings of emotional depth, emotional tone, and personal relevance. In accordance with past research, I hypothesize that females will perceive their social interactions to be deeper, more positive, and more personally relevant than would males, especially for interactions with other females. Likewise, I predict that males will perceive their social interactions to be less emotionally deep, positive, and personally relevant when compared to females, with the lowest ratings occurring in same-sex interactions.

### Method

#### *Participants*

There were 57 participants: 21 males and 36 females between the ages of 18 and 22 ( $M=19.07$ ) from a large Midwestern University. One female participant was removed from the sample due to missing information and is not included in the above numbers. Participants were recruited via introductory psychology courses and received academic credit for their participation. To be eligible, individuals were required to own a profile on the social networking site, [www.facebook.com](http://www.facebook.com). Prior to the administration of the study, IRB approval was obtained.

#### *Procedure*

Participants were required to attend two laboratory sessions. In the first session, which took place in a computer laboratory, participants recorded site usage information, including number of visits to the site per day and the approximate amount of time spent on the site per visit (see Appendix 1 to view the form in its entirety). Participants also recorded the number of “friends” – mostly friends, acquaintances, and similar-age family members – listed on their profiles. Acknowledging friendship on Facebook entitles both people to various privileges, such as viewing each others’ profiles, sending messages, and publicly displaying their relationship to

others. Directions for this short process were explicitly written on the form. The number of total messages on the profile's "wall" was also recorded. "Wall messages" are generally visible to the profile owner and anyone who has access to his/her profile, often including hundreds of people. The highly public aspect of this message board makes it particularly interesting.

Next, participants were provided with a tutorial directing them to identify 25 unique wall messages. The participant first recorded the name and gender of each unique message sender. One message from each of the 25 senders was then copied from the website and pasted into a word-processing document. In short, each participant submitted 25 messages from 25 distinct senders. Messages were usually selected chronologically, with the most recent messages first, although participants were not specifically instructed to use this method. Participants then omitted any information that identified both the senders and themselves. Such deletions included names, contact information, and photographs. Thus, no connections between the messages and their senders or the participants were possible. The participants were informed that they could omit any wall message if they desired, and they were instructed to record the number of messages withheld on the data collection form. Only one participant withheld any messages from submission.

Between sessions, the researchers divided the messages into "thought segments." These segments indicated a shift in purpose or meaning of the written material. Five trained coders then coded each thought unit on the three social support variables: emotional depth, emotional tone, and personal relevance.

Inter-rater reliability was acceptable for all three codes. Emotional depth had inter-rater reliability correlations  $r = .44-.69$ ,  $p < .01$  with Cronbach's alpha = .86. Emotional tone demonstrated correlations  $r = .56-.74$ ,  $p < .01$  with Cronbach's alpha = .89. Personal relevance



had inter-rater reliability measures  $r = .50-.85$ ,  $p < .01$  with Cronbach's alpha = .88. Overall, most coders had approximate correlations  $r = .60$  at  $p < .01$ .

After returning for the second session, participants received their original packet and their own segmented wall messages (see Appendix 2 for an example of segmented wall messages). They coded each post for emotional depth, emotional tone, and personal relevance. Lastly, they completed the Life Orientation Test-Revised (Scheier, Carver & Bridges, 1994).

Prior to the data analysis, the number of coded wall posts for each participant was reduced from 25 to 17. This accommodated participants who were not able to provide the total number of requested messages, incorrectly counted the number of posts submitted, etc. Seventeen messages, many with several thought units apiece, provided enough information to make analysis possible. To arrive at the means for the social support measures, mean ratings were computed for each message. Then, these were averaged to establish the participants' means for each social support measure.

#### *Measurement/Instrumentation*

Emotional depth measures relationship quality between the post recipient and sender (Appendix 3 contains the scoring guidelines for all measures used). Emotional depth was coded on a 4-point Likert scale, from "very superficial" (1) to "very intimate" (4). A score of "1" indicates the post is purely informational (ex: "The midterm is at 11:30"); a "2" involves social conventions and ideas that would be expressed to almost anyone (ex: "We should hang out one of these days."); a "3" includes inside jokes and personal revelations while still maintaining a degree of privacy (ex: "That party was a lot fun. Thanks for coming with us."); a "4" is quite personal and intimate, including confidential and/or personalized information (ex: "I'm taking

the break-up really hard. I just didn't see it coming."'). As there does not seem to be a neutral code applicable to this measure, only four points were used.

Emotional tone was coded on a five-point Likert scale, with 1 meaning "very negative," 3 meaning "neutral," and 5 meaning "very positive." Unlike emotional depth, a neutral emotional rating is essential to provide the most accurate emotional information about each segment. An example of a "1" message is, "I really hate math. I failed Monday's test and my teacher sucks." A very positive message may say, "You look so gorgeous in your picture! I can't wait to see you next weekend!" Emotional tone describes the positiveness of the posts, a measure crucial in the examination of the emotional quality of individuals' social interactions.

Personal relevance measured whether or not the message had a general or a personal focus and was coded dichotomously for each thought segment, receiving either a "personal" or "general" label. Personal segments were those that were aimed specifically at the recipient (ex: "I better see you at my concert on Saturday!") while general segments were any segments not referring to the recipient in any way (ex: "School is good, but I changed my major.'). This construct measured the personal relevance of each post to its original recipient.

One's emotional outlook is crucial to the understanding of social interactions and support. The Life Orientation Test-Revised is currently the most valid and reliable scale to measure this construct (LOT-R, Scheier, Carver, & Bridges, 1994). The complete test is included in Appendix 1. Its test-retest reliability ranged from .56 (after 24 months) to .79 (after 28 months). The LOT-R has demonstrated adequate convergent validity; it correlated modestly with scales measuring self-esteem (.50), neuroticism (approximately -.38), trait anxiety (-.53), and self-mastery (.48). Furthermore, the scale had insignificant differences when separated by sex. In

this study, it had a Cronbach's alpha score of .75, quite similar to the original .78 found by the scale's creators. It is evident that the scale is measuring the same construct for all participants.

## Results

### *Facebook Usage Characteristics*

Refer to Table 1 for all Facebook usage means and standard deviations. Of the total sample ( $N=57$ ), the mean time spent on the Facebook website per visit was 19.17 minutes ( $SD=15.19$ ). Females spent significantly more time per visit than males,  $t(55) = -3.46, p < .01$ .

Overall, individuals ( $N=57$ ) reported visiting their Facebook profile an estimated 3.92 times per day ( $SD=3.38$ ). Females were somewhat more likely than males to visit the site, but this gender difference was not significant.

The range of the number of "friends" listed on the site for the complete sample ( $N=57$ ) was 10-1,174 friends. Females listed significantly more friends than males,  $t(55) = -2.18, p < .05$ .

The entire sample ( $N=55$ ) reported a range of 17-3,842 messages on their Facebook "walls." While females had more total messages posted on their sites than males, no significant differences were found.

### *Differences Between Received and Perceived Social Support Measures: Overall and by Gender*

To test the hypothesis that optimism scores should correlate positively with received social support (measured by trained third-party coders) and even stronger with perceived social support (measured by participants), it was first necessary to determine whether there were significant differences between received and perceived social support. These predicted differences were explored using paired t-tests. Significant differences were found between received and perceived social support for emotional depth and emotional tone for the entire

sample, although males did not show any significant differences in any measure of social support. These conclusions will now be described in more detail.

*Perceived vs received emotional depth: differences, overall and by gender.* For the entire sample ( $N=56$ ), perceived emotional depth was significantly greater than received emotional depth (see Table 2 for means and standard deviations),  $t(55) = 2.87, p < .05$ . There were, however, different patterns for males and females. Thus males perceived their emotional depth to be greater than their received emotional depth, but this difference was not significant. However, females significantly perceived emotional depth to be greater than the received emotional depth they received,  $t(36) = -2.73, p < .01$ .

*Perceived vs received emotional tone: differences, overall and by gender.* The complete sample's perceived emotional tone was significantly greater than the received emotional tone,  $t(55) = 3.75, p < .01$ . Again, males did not have any significant differences between perceived and received emotional tone. Females' perceived emotional tone ratings were significantly greater than received emotional tone,  $t(36) = -3.94, p < .01$ .

*Perceived vs received personal relevance: differences, overall and by gender.* Statistical differences for received and perceived personal relevance were not found for the total sample, even when divided by gender. Participants' perceptions of personal relevant messages was identical to their received personal relevant support, ( $M = 1.62, M = 1.62$  respectively). Males also showed similar ratings: perceived personal relevance and received personal relevance were also quite similar, ( $M = 1.66$  and  $M = 1.70$ ). Following this trend, females' perceived personal relevance paralleled received personal relevance ratings, ( $M = 1.58, M = 1.60$  respectively).

*Correlations among Optimism and Measures of Social Support, Overall and by Gender*

A major hypothesis of the study was that individuals with high optimism scores would positively correlate with all three measures of social support. In particular I also assumed that these correlations would be higher for perceived ratings of social support than for the received ratings of social support. Although I did not expect any differences in these correlations by gender, I nevertheless examined this variable.

Initially, I conducted three Pearson correlations, examining the entire sample as well as dividing it by gender, to compare the LOT-R's optimism scores with both received and perceived ratings of all three social support measures. Correlations for the total sample and males vs. females can be found in Tables 3 and 4, respectively. The entire sample's optimism scores correlated positively with perceived emotional tone,  $r = .30, p < .05$ . For males, optimism ratings and perceived emotional tone were moderately correlated,  $r = .50, p < .05$ . For females, there were no significant correlations between received or perceived social support and optimism. Excluding the significant correlation between males' perceived emotional tone and optimism, the correlations found were weak. As seen in Table 4, optimism correlations for males ranged from  $r = -.15$  to  $r = .18$  and correlations for females ranged from  $r = -.17$  to  $r = .23$ . These low correlations do not support the optimism hypotheses, although there is partial support for the second optimism hypothesis provided by the previously mentioned correlation between males' perceived emotional tone and optimism levels.

#### *Gender Differences in Perceived Social Support*

Recall that one of the major hypotheses predicted that the perceived ratings by females on all social support measures would be higher than the perceived ratings by males. For females, I particularly expected this difference for their communications between members of the same sex. This is consistent with the values females have towards social support in their relationships. I had

a different hypothesis for males. Here I predicted that the lowest levels of social support would occur for messages sent by other males. Again, this agrees with previous findings regarding males' communication styles and the presence of strong emotions in their social interactions.

In order to explore these relationships I conducted repeated measures ANOVAs in which I treated the gender of the message recipient as the between-subjects factor and the gender of the message sender as the within-subjects factor. While this is unusual and not a true repeated measures design, it was the most comprehensive technique to adequately measure the main effects and interactions for and between messages sent and received by males and females for all three measures of social support. Several intriguing main effects and one interaction were found.

A main effect for Sender's Gender was observed for emotional depth,  $F(1,55) = 9.47, p < .05$ , indicating that messages sent by females ( $M=2.68, SD=.41$ ) are significantly more intimate and self-disclosing than those sent by males ( $M=2.49, SD=.42$ ). Furthermore, a Sender's Gender X Recipient's Gender interaction was observed for emotional depth,  $F(1,55) = 8.94, p < .05$ .

There was no significant interaction or main effect found for the emotional tone perceived by males and females when divided by the gender of the message sender. Still, it should be noted that there was a near main effect of Sender's Gender,  $F(1,55) = 3.86, p = .06$ .

Unlike the other two measures of social support, a main effect was observed for Recipient's Gender,  $F(1,55) = 6.84, p < .05$ , suggesting that males ( $M=1.67, SD=.16$ ) received more personally relevant messages than females ( $M=1.57, SD=.18$ ). Neither a main effect for Sender's Gender nor an interaction between both factors was detected.

### *Social Support Correlations*

Although I had no specific hypothesis about correlations between the various measures of *social* support, I examined these correlations for the entire sample and then separately by gender

and obtained some interesting results. (Again, means and standard deviations can be found in Table 2.) Two measures of perceived support correlated positively: emotional tone and emotional depth,  $r = .44, p < .01$ . Measures of perceived social support also correlated directly with their third-party-coded counterparts. Received emotional tone and perceived emotional tone were positively associated,  $r = .41, p < .01$ . Perceived personal relevance and received personal relevance were also positively correlated,  $r = .43, p < .01$ .

Several significant social support correlations between the various measures were found for females. Their perceived emotional depth and perceived emotional tone ratings were strongly correlated,  $r = .64, p < .01$ . Furthermore, perceived emotional tone and perceived personal relevance were also positively correlated,  $r = .40, p < .05$ . When comparing received and perceived social support, two measures correlated with each other. Received emotional tone and perceived emotional tone were directly related. Personal relevance for both received and perceived message ratings were positively correlated as well,  $r = .36, p < .05$ . Lastly, received personal relevance and perceived emotional depth were also positively related,  $r = .33, p < .05$ .

Males showed only one significant correlation between measures of social support. Their received emotional depth and perceived personal relevance were actually negatively correlated,  $r = -.51, p < .05$ . That is, when they received messages considered high in emotional depth by the third-party coders, the recipients were likely to perceive these same messages to be more general in focus (and vice versa).

To further investigate the unexpected negative correlation between males' received emotional depth and perceived personal relevance and the finding that females' received personally relevant messages correlated positively with their perceived emotional depth ratings, another correlation was performed that looked at the relationships of these measures when

separated by the gender of the message sender. When coded by independent coders, the emotional depth received by males from both females ( $M=2.49$ ,  $SD=.22$ ) and other males ( $M=2.39$ ,  $SD=.32$ ) correlated positively,  $r = .49$ ,  $p < .05$ . However, no significant relationships were found between the emotional depth and the personal relevance of the messages sent by males or the messages sent by females. Similar results were discovered for messages received by females. Positive correlations were found between received personally relevant messages from males ( $M=1.58$ ,  $SD=.21$ ) and females ( $M=1.62$ ,  $SD=.15$ ),  $r = .33$ ,  $p < .05$ , and between the perceived emotional depth in messages sent by males ( $M=2.46$ ,  $SD=.42$ ) and females ( $M=2.76$ ,  $SD=.39$ ),  $r = .65$ ,  $p < .01$ . No significant relationships were found between received personal relevance and perceived emotional depth in messages sent by either males or females.

### Discussion

The present study explored the relationships between incoming social support and recipients' perceptions of this social support received via messages on a social networking website. The first hypothesis predicted that individuals' optimism scores would directly correlate with the amount of intimate, positive, and personally relevant messages they received (as determined by trained coders' less-subjective ratings). Prior to correlation conductions, I analyzed the presence of significant differences between both the received and perceived measures of emotional depth and emotional tone of the messages, although this was specific to females. In fact, both genders had higher ratings for perceived measures of emotional depth and emotional tone when compared to received ratings, but these gaps were only significant for females. Since the personal relevance of the messages was identical between received and perceived ratings, it could not be expected to find differences in the correlations among the perceptions of the personal relevance and amount of personal relevance received. The results



yielded no support that optimism levels are positively related to social support. Regardless of emotional outlook on life, all individuals seem to be receiving messages offering similar social support. In general, the messages received on the site disclose little intimate information, are only slightly more positive than neutral, and are moderately personally relevant.

The second optimism hypothesis predicted that optimism levels would positively correlate with individuals' perceptions of social support in accordance with the mood congruency bias. With one exception, the results indicate that perceiving social support that corresponds with one's emotional outlook - as demonstrated by Niedenthal and Setterlund (1994) – simply does not occur for social networking messages. Indeed, males' optimism levels were directly associated with their perceptions of intimacy and self-disclosure included in their messages. This is similar to the finding by Geers, Reilley & Dember (1998) that males were significantly likely to have same-sex friendships with others with like optimism levels. Still, it seems that both low- and high-optimism individuals perceive the messages they receive in similar ways. Given the low self-disclosure and fairly neutral content of the messages, this may be due to the relative low impact that online messages have when compared to face-to-face social interactions. If individuals place little emotional emphasis on the messages they receive on social networking sites, they may be less-likely to allow their overall emotional outlook to affect the way they perceive their messages. It may be that these messages are just an extension of everyday social exchanges, an idea that agrees with previous findings that online social interactions are often supplemental forms of communication of pre-existing friendships (Wellman, et al., 2001; PEW Internet & American Life Project, 2007). Short and rather mundane, they simply are not powerful enough to elicit much of an emotional reaction from their recipients.

While not included in the hypotheses, exploring the relationships between various measures of social support and gender provide further knowledge about the type of messages being transmitted on social networking sites. First, it is not surprising that females' own ratings of both emotional tone and personal relevance correlated positively with the independent-coders' representation of received emotional tone and personal relevance. Since both the participants and the independent coders evaluated the same messages, it can only be expected that they would often achieve a consensus on some of the materials. This is especially true regarding personal relevance, as both the received and perceived ratings were nearly identical and the dichotomous coding – the message is either about or not about the recipient – made it easier to reach such agreement. Furthermore, the positive relationship between the perceived emotional depth and emotional tone as well as that observed between perceived emotional tone and personal relevance in the females' messages provides more information about the way females interpret their messages. The more intimate self-disclosure occurring in the message, the more likely a female will consider it to be of a positive nature. This is consistent with the research on non-internet social relationships that has found that females generally engage in more self-disclosure themselves and highly value this characteristic in their friendships (Veniegas & Peplau, 1997; Pagano & Hirsch, 2007). When they read messages that contained more intimate facts, they perceived these messages to be more pleasant. Females were also more likely to perceive a message to be intimate when it was personally relevant. This is sensible, as one would expect that much of the intimate exchanges relate to the recipient. In addition, more positive messages also tend to be more personally relevant to females. Thus, when a female reads an online message that includes information about her, she is likely to view it in a favorable light. In accordance with past research by Petty and Cacioppo (1984) and Sorrentino, et al. (1988), this

may be happening because the females are more fully processing the messages about themselves than are males, resulting in more salient ratings of positive emotional tone. Females who use social networking sites appear to benefit when the messages they receive are about them and include high amounts of self-disclosure. Again, this supplemental communication occurring between friends is an advantageous experience for females. Because similar relationships were not seen amongst males, it can be inferred that males simply do not process their online messages in the same way that females do. The importance of their perceptions of personal relevance and emotional depth do not have anything to do with their views of how positive or negative their messages are.

An unexpected correlation was discovered concerning social support both received and perceived. It was surprising to find a negative relationship between males' received emotional depth and perceived personal relevance in their messages. When males received more intimate messages, they were more likely to view them as having a general focus. This contradicted the finding that females perceive messages about themselves to be more intimate. The males' more intimate messages were most likely from friends talking about their own lives – not the recipient's. Since females are more likely to use these websites (Boyd, 2008) and have already been established to engage in more intimate social interactions (Johnson, et al., 2007), it could be that messages sent by females to males are creating this correlation. The female senders may be sending more messages disclosing intimate information about their own lives. Likewise, less intimate messages with more personal relevance may be coming from other males who have less inclination of disclose intimate information. For example, the common expression "Hey bro, what's up?" fits the description of high personal relevance and low emotional depth. It is a fairly commonplace expression on these sites, especially between males. Further investigation

provided no definite answer to this speculation, as there were no associations observed for messages sent by either males or females and their respective emotional depth content.

Continued study may help to resolve this rather puzzling discovery.

Gender differences in perceptions of online social support were the focus of the last two hypotheses. I predicted that females would perceive their messages to contain higher levels than males of emotional depth, emotional tone, and personal relevance than males would perceive, especially for those messages sent to them by other females, and that males would perceive less emotional depth, emotional, tone, and personal relevance levels than females, especially concerning messages sent by other males. Although most of these predictions were not confirmed, there were some interesting differences that arose. When females were the senders, their messages were more likely to contain more intimate and positive information than when males sent the messages. Again, this fits the more self-disclosing image the literature presents for females. Consistent with my hypothesis, females sent messages with the highest levels of emotional depth to other females. While insignificant, it also appears that messages sent by females to other females are the most positive messages perceived by any group. Females maintain their online social interaction styles as they communicate with friends on the internet. Obviously, the closeness, high self-disclosure, and pleasantness in females' same-sex face-to-face friendships are also evident in their online interactions. Since males do not generally engage in as much intimate self-disclosure as females, they also seem to be sustaining their offline communication styles when they interact on social networking websites.

Unlike the other two constructs of social support, personal relevance was the only measure to yield a main effect for the gender of the message recipient. Contrary to expectations, males actually perceive their messages as more personally relevant than do females. It does not

seem that males are receiving less intimate messages, so this difference in perception must be due to their own views of their online messages. It is possible that males merely relate more information back to their own lives and interests. While this is not apparent in the literature, it is certainly an interesting result worth future exploration.

It is worth mentioning some of the significant gender differences observed regarding various website usage information. Similar to offline studies (Due, et al., 1999), females had significantly larger social networks, listing many more friends than males. They also reported spending more time on the site for each visit, consistent with Boyd's (1998) findings. Once more, it is becoming clearer that females are maintaining their very sociable and intimate relationships when they connect over the internet.

### *Limitations*

While the study provided new and interesting information about the social interactions occurring on social networking websites, it has its limitations. One potential issue involves the coding of the messages by the third-party coders. It is possible that a lack of context may have caused underestimates of the power of the social support measures contained in the messages. Extensive training and practice completed by the third-party coders and the large number of messages coded should have minimized this type of error, but misreading some messages due to lack of context was unavoidable. Still, all coders were given a "non-codable" option, eliminating the incorrect coding of messages that were simply too vague or ambiguous to interpret.

Lastly, the emotional salience of the messages may have been lower than expected because the messages had been previously read by the participants. While it would have been optimal to assess the social support qualities for each message when it was first received, this was impossible in the methodology of this study.

Another potential limitation may have occurred if either participants or third-party coders allowed scores on one measure – for example, emotional depth – to influence their codes for other measures, such as emotional tone. All coders were instructed to think of each measure independently, but cross-contamination cannot entirely be eliminated.

Because social networking social support studies are relatively rare, there are still many exciting directions to pursue. It would be intriguing to administer this study to a population of middle school or high school participants. The increased reliance on social status and interactions causes these websites to acquire high importance to many younger adolescents' overall emotional well-being. Bullying is also more common amongst younger users. Their perceptions of social support may be different than the college students' evaluations of their messages.

Individuals who decline to own a social networking profile comprise another group worth studying. As Boyd (2008) points out, most young adults know about these websites and have their own opinions. They either choose not to join the sites – “conscientious objectors” – or do not have adequate access to maintain a profile. Learning more about this population of young adults may provide us with a contrasting group by which to compare the profile owners that have already been studied.

Although most aspects of the hypotheses could not be supported, this study provided a much more qualitative view of the social arena of social networking websites. The media have often negatively portrayed these sites. A dark shadow was cast on Facebook when New York's Attorney General, Andrew Cuomo, made his disgust with the site public knowledge. In a letter sent to Facebook CEO Mark Zuckerberg, Cuomo stated, “There is widespread pornographic and obscene content on Facebook.” While many of the sensational stories of drug dealers and sexual predators lurking on these websites are the first to make headlines, they are quite rare

occurrences. Most of the messages analyzed in this study were quite tame and mundane. They were more likely to reference an upcoming football game or the decision to switch majors than to propose a wild night of drugs and sexual encounters. Social networking sites on the college level are yet another way the Millennial generation is using technology to stay connected – even if the exchanges occurring seem to be fairly low in all measures of social support. Further research on younger individuals may provide more support for this study's findings of routine online social exchanges while also calming many parents' fears that these websites are havens for sexual predators and deviants.

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Table 1

*Means and Standard Deviations for Facebook Usage Characteristics*

	Sample		Males		Females	
	M	SD	M	SD	M	SD
1. Time spent per visit (minutes)	19.17	15.19	10.83**	7.80	24.03**	16.38
2. Visits per day	3.92	3.38	2.93	2.16	4.5	3.83
3. Friends on Facebook	385.58	220.16	304.90*	179.72	432.64*	230.03
4. Facebook “wall” messages	643.25	633.72	472.95	415.55	740.57	717.30

*Note.* \* $p < .05$  for gender differences; \*\*  $p < .01$  for gender differences.

Table 2

*Means and Standard Deviations for Received and Perceived Measures of Social Support*

	Sample		Males		Females	
	M	SD	M	SD	M	SD
1. Received Emotional Depth	2.46*	.23	2.45	.24	2.47**	.35
2. Perceived Emotional Depth	2.62*	.38	2.55	.42	2.66**	.23
3. Received Emotional Tone	3.55**	.25	3.44	.27	3.60**	.23
4. Perceived Emotional Tone	3.70**	.33	3.55	.35	3.79**	.29
5. Received Personal Relevance	1.62	.14	1.66	.17	1.58	.12
6. Perceived Personal Relevance	1.62	.15	1.70	.14	1.60	.13

*Note:* Emotional depth has a possible range of 1.00 to 4.00; emotional tone has a possible range of 1.00 to 5.00; personal relevance has a possible range of 1.00 to 2.00.

\* $p < .05$  between received and perceived measures. \*\* $p < .01$  between received and perceived measures.

Table 3

*Bivariate Pearson Correlations Among Optimism, Received Social Support and Perceived Social Support for Entire Sample*

Measure	1	2	3	4	5	6	7
1. LOT-R	--	.18	.02	.01	.16	.30*	-.16
2. Received Emotional Depth		--	.05	-.24	.14	-.13	-.11
3. Received Emotional Tone			--	.15	-.10	.41**	-.07
4. Received Personal Relevance				--	.03	.00	.43**
5. Perceived Emotional Depth					--	.44**	.02
6. Perceived Emotional Tone						--	.02
7. Perceived Personal Relevance							--

*Note.* \*  $p < .05$ . \*\* $p < .01$ .



Table 4

*Bivariate Pearson Correlations Among Optimism, Received Social Support and Perceived Social Support for Male and Female Recipients*

Measure	1	2	3	4	5	6	7
1. LOT-R	--	.08	.16	-.15	.05	.50*	-.09
2. Received Emotional Depth	.15	--	-.03	-.36	.33	-.14	-.51*
3. Received Emotional Tone	-.17	.09	--	.34	-.29	.31	.07
4. Received Personal Relevance	.23	-.14	.10	--	-.25	-.17	.43
5. Perceived Emotional Depth	.18	.04	-.01	.33*	--	.16	-.16
6. Perceived Emotional Tone	.01	-.15	.37*	.29	.64**	--	-.10
7. Perceived Personal Relevance	-.01	.14	.05	.36*	.26	.40*	--

*Note.* Numbers in the upper-right section of the table refer to messages received males and numbers in the lower-left section refer to messages received by females.

\* $p < .05$ . \*\* $p < .01$ .

Number	Initials of Sender	Gender	# of Messages Sent (Tallies)	Closeness (1-5)*
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## Appendix 1: Sample Participant Packet

Subject Identification Number: \_\_\_\_\_

(This is a combination of the numbers in your permanent home's street address and the last 4 digits of your phone number.)

Please complete the following questions regarding your demographics and your usage of the website [www.facebook.com](http://www.facebook.com).

1. Gender (please circle): Male / Female

2. Birthdate: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

3. Age: \_\_\_\_\_

4. Class Rank (please circle): 1 / 2 / 3 / 4 / 5+

5. On average, how much time do you spend per visit on Facebook (in minutes)? \_\_\_\_\_

6. On average, how many times a day do you visit Facebook? \_\_\_\_\_

7. On average, how many times a week do you visit Facebook? \_\_\_\_\_

8. On average, how many times a month do you visit Facebook? \_\_\_\_\_

9. What is the date of your first "wall post" on your Facebook profile? \_\_\_\_\_

**Directions:** Log onto [www.facebook.com](http://www.facebook.com) and click on the "Profile" tab at the top of the site. Scroll to the bottom of your profile or until you reach your wall. (The Superwall, Funwall, Advanced Wall, etc. do NOT apply. Please use the default wall only.) Click on the link, "see all ### wall posts." Click on the "Last" link that appears after the blue number links near the top of the site. Find the first wall message you received and record the date on the line provided above.

10. How many total "friends" do you have on Facebook? \_\_\_\_\_

**Directions:** On the Facebook website, click on the "Friends" tab. Once on this screen, click on the "Everyone" tab located beneath the "All Friends" heading. At the top of your list of friends, you will see the sentence, "You have ### friends." Enter this number on the line above.

Example:	TH	M	III	5
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Number of total "Wall Posts" on Facebook site: \_\_\_\_\_

Number of total posts omitted: \_\_\_\_\_

\*Closeness indicates the intimacy of your relationship with the particular sender. Examples:

1 = someone you know very little; you may have never met.

2 = someone you with whom you are casually friendly and have met a few times.

3 = an acquaintance or friend with whom you share little personal information or emotions.

4 = a good friend with whom you feel a strong connection.

5 = a best friend; someone with whom you speak to often and share nearly everything.

### Life Orientation Test-Revised

Please be as honest and accurate as you can throughout. Try not to let your response to one statement influence your responses to other statements. There are no "correct" or "incorrect" answers. Answer according to your own feelings, rather than how you think "most people" would answer.

**A = I agree a lot**

**B = I agree a little**

**C = I neither agree nor disagree**

**D = I DISagree a little**

**E = I DISagree a lot**

- \_\_\_\_\_ 1. In uncertain times, I usually expect the best.
- \_\_\_\_\_ 2. It's easy for me to relax.
- \_\_\_\_\_ 3. If something can go wrong for me, it will.
- \_\_\_\_\_ 4. I'm always optimistic about my future.
- \_\_\_\_\_ 5. I enjoy my friends a lot.
- \_\_\_\_\_ 6. It's important for me to keep busy.
- \_\_\_\_\_ 7. I hardly ever expect things to go my way.
- \_\_\_\_\_ 8. I don't get upset too easily.
- \_\_\_\_\_ 9. I rarely count on good things happening to me.
- \_\_\_\_\_ 10. Overall, I expect more good things to happen to me than bad.

## Appendix 2: Sample Message Scoring Sheet

Subject Number 2353708																					
#	Initials	Message	Emotional Depth					Emotional Tone					Subject Focus								
			Very Superficial		Slightly Superficial		Personal	Very Personal	Uncodable	Very Negative		Slightly Negative	Neutral	Slightly Positive	Very Positive	General	Personal				
			1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
1	KK	Good to hear about the feet, and about the midterms...yeah...not feeling them so much. Just excited to get them out of the way and have it be the weekend!	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
2	LM	i love you too k and miss you so much	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
3	AG	i def need to visit you pronto	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
		haha omg i know i did too...	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
		anyway i wanted to congratulate you for winning the competition the other night...	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
4	TC	i owe you a dollar haha	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
5	LT	i love my roomie more... :) we HAVE to hang out again next weekend...but hopefully doing something other than making bets on guys	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
6	BC	hahah thats crazy.	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
		schools pretty good.	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
		i bought a frog like 4 days ago and it died this morning hahaha pretty sad.	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
7	SM	hows school going for you??	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
		haha i think josh has it back now...	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P
		love ur status btw...lol	1	2	3	4	U	1	2	3	4	5	U	1	2	3	4	5	U	G	P

## Appendix 3: Message Scoring Guidelines

## Scoring Guidelines

Please circle the correct score for every portion of your 25 messages. Your scores should reflect your own personal ideas and opinions. There are no right or wrong choices. Still, please try to refrain from using the “uncodable” option unless it is absolutely necessary. The following guidelines are meant to further clarify the scoring options for each category.

**Emotional Depth:** this is meant to measure the level of intimacy conveyed in each message. Give each message portion a score where indicated on the scoring sheet. **It may be helpful to ask yourself, “Would the sender of this message say the same thing to a stranger? An acquaintance? A good friend? Just me?”**

<u>Score</u>	<u>Explanation</u>	<u>Examples</u>
1 – Very Superficial	<ul style="list-style-type: none"> <li>- Contains no emotional content</li> <li>- Informational, impersonal</li> <li>- <b>Could express same message to a complete stranger</b></li> </ul>	“The weather is nice here.” “What time is class tomorrow?” “The CD goes on sale today.”
2 – Slightly Superficial	<ul style="list-style-type: none"> <li>- A social convention/rhetorical question</li> <li>- Little emotional content</li> <li>- <b>Could express same message to someone the sender knows very little</b></li> </ul>	“We should hang out.” “How have you been?” “What’s up?”
3 – Slightly Personal	<ul style="list-style-type: none"> <li>- Reveals an emotion</li> <li>- Message is personalized towards you and <b>could not apply to just any person</b></li> <li>- May include “inside jokes”</li> </ul>	“Thanks for the birthday love! It was fun.” “I got a milkshake today and it made me think of you. Hahaha.” “I hope you’re doing well. Good luck on your test!”
4 – Very Personal	<ul style="list-style-type: none"> <li>- Contains high level of emotional content</li> <li>- <b>Contains personal information shared between close friends/family</b></li> <li>- May evoke strong feelings of emotion from you</li> </ul>	“I miss you soooo much and can’t wait to hang out at your house and play with the puppy!” “We had to put Rover down last week. I still feel sort of down about it. ☹️” “Thanks for making me feel better yesterday when I needed it.”
U - Uncodable	<ul style="list-style-type: none"> <li>- Message portion does not contain enough material to correctly classify</li> <li>- Lack of context makes scoring impossible</li> </ul>	“Yup.” “hahaha. Maybe.”

**Emotional Tone:** this score represents the overall positive or negative tone of the message portion. Each message portion should receive a score. **Ask yourself, “How does this message make me feel?”**

<u>Score</u>	<u>Explanation</u>	<u>Examples</u>
1 – Very Negative	- Message portion reveals <b>blatantly sad, angry, or otherwise pessimistic information.</b>	“That girl makes me so freaking mad!” “I didn’t get into any grad schools. I don’t know what I’m going to do.”
2 – Slightly Negative	- Message portion has <b>underlying feeling of anger, annoyance, sadness, or other pessimistic material</b>	“That test was pretty hard.” “How come I always get caught in the rain without my umbrella?”
3 – Neutral	- Message portion <b>has no classifiable emotional quality.</b>	“I’m going to Easton tomorrow.” “Where is your swim meet?”
4 – Slightly Positive	- Message portion is <b>somewhat happy, humorous, or otherwise optimistic</b>	“That’s a really good picture of you!” “You made me smile last night... haha.”
5 – Very Positive	- Message portion is <b>extremely happy, humorous, or otherwise optimistic</b>	“I love you soooo much!” “The party this weekend is going to be so amazing!!”
U - Uncodable	- Message portion does not contain enough material to correctly classify - Lack of context makes scoring impossible	“no.” “it wasn’t.” “Sally.”

**Subject Focus:** this score measures whether or not the entire message relates to you (the recipient of the message) personally or is general in nature. **Messages that express information about the sender are considered to be general in focus. Personal messages usually contain the words, “you,” “we,” and “let’s.”**

<u>Score</u>	<u>Explanation</u>	<u>Example</u>
G – General	<ul style="list-style-type: none"> <li>- Does not relate to you in any way, although it may concern the message sender</li> <li>- <b>No references to you or your past, present, or future actions</b></li> </ul>	<p>“<b>I</b> don’t want to drive back home this weekend.”</p> <p>“He bought <b>me</b> a necklace for <b>my</b> birthday.”</p> <p>“Go Buckeyes!”</p>
P – Personal	<ul style="list-style-type: none"> <li>- Message concerns you and your feelings and behaviors</li> <li>- Specifically references you and/or your past, present, or future actions</li> <li>- <b>Look for words such as “you,” “we,” and “let’s”</b></li> </ul>	<p>“<b>Your</b> dancing skills last night were hilarious!”</p> <p>“<b>You</b> should come with me to the game.”</p> <p>“<b>We</b> really know how to throw a party!”</p>



